# **Grade 11 Physics University**

### 1. Course Details

### Lawrence Park C.I.



Teacher(s): A. Fedor, R.McCoubrey Faculty: Science Faculty Office Phone: 416-393-9500 ext. 20060

Name of ACL: Ms R. McCoubrey

**ACL Contact:** 

416-393-9500 ext. 20060

**Textbooks:** 

Physics 11 (Nelson) Replacement cost: 100\$ Date revised: June 2014

**Course Name:** 

Grade 11 Physics University

Course Code: SPH3U1

**Prerequisite Course Code:** 

SNC2D1

Credit Value: 1

**Essential Resource Materials:** 

**Textbook** 

#### **TDSB**

# 2. Overall expectations

- This course develops students' understanding of the basic concepts of physics
- Students will explore kinematics, with an emphasis on linear motion; different kinds of forces; energy transformations; properties of mechanical waves and sound; and electricity and magnetism.
- They will enhance their scientific investigation skills as they test laws of physics.
- Students will analyze the interrelationships between physics and technology, and consider the impact of technological applications of physics on society and the environment.

## 3. Learning Skills and Work Habits

Evaluated on Report Card as: E (excellent); G (good); S (satisfactory); N (needs improvement)

The Learning Skills demonstrated by a student in every course are evaluated in the following six categories: Responsibility, Organization, Independent Work, Collaboration, Initiative, and Self-Regulation. The Learning Skills are evaluated using a four-point scale. The goal for each student is to improve Learning Skills which will translate into improved student's overall success.

In addition, completion of the assigned homework/assignments on time will contribute to student's success. We also know that regular attendance in all classes is essential for success; please avoid scheduling appointments during school time.

Students are expected to demonstrate academic honesty on all assignments, presentations, tests, and examinations. Students who cheat or plagiarize will receive a mark of zero for the assignment, presentation, test, or examination.

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Responsibility	The Student:			
	- fulfils responsibilities and commitments within the learning environment;			
	- completes and submits class work, homework, and assignments according to agreed-upon timelines;			
	- takes responsibility for and manages own behaviour.			
Organization	The Student:			
	- devises and follows a plan and process for completing work and tasks;			
	- establishes priorities and manages time to complete tasks and achieve goals;			
	- identifies, gathers, evaluates, and uses information, technology, and resources to complete tasks			
Independent Work	The Student:			
	- independently monitors, assesses, and revises plans to complete tasks and meet goals;			
	- uses class time appropriately to complete tasks;			
	- follows instructions with minimal supervision			
Collaboration The Student:				
	- accepts various roles and an equitable share of work in a group;			
	- responds positively to the ideas, opinions, values, and traditions of others;			
	- builds healthy peer-to-peer relationships through personal and media-assisted interactions;			
	- works with others to resolve conflicts and build consensus to achieve group goals;			
	- shares information, resources, expertise and promotes critical thinking to solve problems and make			
	decisions			
Initiative	The student:			
	- looks for and acts on new ideas and opportunities for learning;			
	- demonstrates the capacity for innovation and a willingness to take risks;			
	- demonstrates curiosity and interest in learning;			
	- approaches new tasks with a positive attitude;			
	- recognizes and advocates appropriately for the rights of self and others			
Self-Regulation	The student:			
Sen-Regulation	- sets own individual goals and monitors progress towards achieving them;			
	- seeks clarification or assistance when needed;			
	- assesses and reflects critically on own strengths, needs, and interests;			
	- identifies learning opportunities, choices, and strategies to meet personal goals.			
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# 4. Teaching/Assessment and Evaluation Strategies – Course Work (70%)

Students will demonstrate achievement of all the overall expectations of the course. Missed and/or incomplete assignments will have an impact on the final grade where there are a significant number of curriculum expectations that have not been evaluated because of missed assignments. Timelines and units may be adjusted to accommodate student needs. Teachers may deduct marks for late assignments, to a total of 10% of the value of the assignment. Late assignments will not be accepted after the assignment has been taken up in class or the marked assignment has been returned to the class, at which point a mark of zero may be applied.

Unit #	Culminating Tasks	<b>Achievement Chart Focus</b>	Timelines
1	Unit 1: Kinematics  • Assignment/Lab  • Unit 1 Test	K/U; T/I; C; A K/U; T/I; C; A	Oct 2013 Nov 2013
2	Unit 2: Forces  • Lab Activity: Formal Lab Report • Unit 2 Test	K/U; T/I; C; A K/U; T/I; C; A	Nov. 2013 Dec. 2013
3	Unit 3: Energy and Society  Lab Activity Unit 3 Test	K/U; T/I; C; A K/U; T/I; C; A	Jan 2014 March 2014
4	Unit 4: Waves and Sound  • Musical Instrument assignment  • Unit 4 Test	K/U; T/I; C; A K/U;T/I;C;A	March 2014 April 2014
5	Unit 5: Electricity and Magnetism Lab Activity Unit 5 Test	K/U;T/I;C;A K/U;T/I;C;A	April 2014 May 2014

# **Teaching/Assessment and Evaluation Strategies – Final Evaluation (30%)**

All students must take part in the culminating activities for each course at every grade level of study

<b>Summative Tasks</b>	<b>Achievement Chart Focus</b>	Weighting
Final Evaluation  A comprehensive final exam written during the June exam period.  This is based on all course material from September to June, including lab work	K/U; T/I; C; A	30%

1 C T	A	A	
Assessment for Learning (Seeking and int erpreting evidence for use by learners and teachers to decide where the learners are in their learning, where they need to go,	Assessment as Learning (Fostering of students' capacity to be their own best assessors, supported by structured opportunities by teachers for students to assess themselves)	Assessment of Learning  (Assessment that is quantified, illustrating how well the students are learning)	
and how best to get there)	1		
Assessment strategies MAY includes		C4 Jan A Day Jan A	
<ul> <li>Student Product</li> <li>Non-graded quizzes</li> <li>Pre-tests</li> <li>Concept maps, diagrams, cartoons</li> <li>Exemplars</li> </ul>	<ul> <li>K.W.L. charts</li> <li>Exit tickets</li> <li>P.O.E. charts</li> </ul>	Student Product  Tests  Lab report writing  Lab tests  Presentations  Research projects	
Observation     Student warm-up     Class questioning     Assessment of collaborative work     Traffic lighting	Peer/self-assessment of presentations, student work, graphs, problem-solving, quizzes etc.     Teacher observation of lab skills     Teacher observation of student collaboration	Observation	
Conversation	Conversation  Didactic questioning Teacher and peer feedback Teacher support of lab skills development Student-teacher conferences Co-construction of evaluation rubrics	Conversation  Oral evaluation (concepts and lab skills)	
5. Achievement Chart		<u> </u>	
Achievement Categories For Course Work	Description	Weighting	
Knowledge/Understanding	<ul> <li>knowledge of facts and terms</li> <li>understanding concepts, principles, ar theories</li> <li>understanding of relationships betwee concepts</li> </ul>		
Thinking/Inquiry	<ul> <li>critical thinking skills(analyzing, detebias)</li> <li>creative thinking (problem solving)</li> <li>inquiry skills (formulating questions; conducting research; analyzing, interprand evaluating information; drawing conclusions)</li> </ul>	<b>C</b> — —	

Communication	<ul> <li>communication of information and ideas</li> <li>use of visuals and technology – multimedia</li> <li>oral communication (debates, discussions, listening skills, role-playing)</li> <li>written communication (lab report, research paper)</li> </ul>	20 %
Application	<ul> <li>application of concepts, skills, and procedures</li> <li>transfer of concepts, skills, and procedures to new ideas</li> <li>making logical conclusions or generalizations</li> <li>making predictions and planning course of action</li> </ul>	20 %

## 6. Term Grades for Provincial Reports

The grade for each term/reporting period is based on the evaluations that have been conducted to that point in the course and will be preliminary and tentative. They will be based on the most consistent level of achievement to that point in time, but some of the overall expectations, strands, and units will not have been addressed. The students' grades will most likely change when the students' entire work is evaluated by the end of the course.

# Reporting Cycle

Reporting Cycle 1: September 3rd – October 31st

Report Card - November 17th

Reporting Cycle 2: November 3<sup>rd</sup> – January 21<sup>st</sup>

Report Card - February 12th

Reporting Cycle 3: January 20<sup>th</sup> – March 6<sup>th</sup> Report Card – April 16<sub>th</sub>

Reporting Cycle 4: March 30<sup>th</sup> – June 22<sup>nd</sup>

Final Report Card pick up from July 2nd - 10th

Exam Review Day: June 23<sup>rd</sup> (9-11 am only)

### 7. Communication

In addition to class time, students can receive additional assistance from:

- Subject teachers by appointment before/after school, during lunch hour;
- FIFI Find It Finish It from 8:35-9:35am on October  $29^{\text{th}}$  , January  $21^{\text{st}}$  , and Feb  $18^{\text{th}}$